

554708

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
25 November 2004 (25.11.2004)

PCT

(10) International Publication Number
WO 2004/101636 A2

- (51) International Patent Classification⁷: C08G (74) Agent: KIM, Seong-Ki; 14F., Kukdong Building, 60-1, Chungmuro3-ka Chung-ku, Seoul 100-705 (KR).
- (21) International Application Number: PCT/KR2004/001090 (81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (22) International Filing Date: 12 May 2004 (12.05.2004)
- (25) Filing Language: Korean
- (26) Publication Language: English
- (30) Priority Data:
10-2003-0031214 16 May 2003 (16.05.2003) KR (84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- (71) Applicant (*for all designated States except US*): LG CHEM, LTD. [KR/KR]; LG Twin Tower, 20, Yoido-dong, Youngdungpo-gu, Seoul 150-721 (KR).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): KIM, Dong-Ryul [KR/KR]; 109-1102, Luckyhana Apartment, Shin-sung-dong, Yuseong-gu, Daejeon 305-721 (KR). PARK, Sang-Hyun [KR/KR]; 3-406, LG Chemical Apartment, 381-42, Doryong-dong, Yuseong-gu, Daejeon 305-340 (KR). LEE, Hee-Hyun [KR/KR]; 108-905, Sejong Apartment, Jeonmin-dong, Yuseong-gu, Daejeon 305-728 (KR).
- Published:
— *without international search report and to be republished upon receipt of that report*
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: A METHOD FOR PREPARING STYRENE AND MALEIMIDE COPOLYMER USING SUPER CRITICAL FLUID

(57) Abstract: Disclosed is a method for preparing copolymers of styrene and maleimide by imidization-extrusion of copolymers of styrene and maleic anhydride using a supercritical fluid. The method can be performed at a lower temperature compared to a conventional method and can remove residual amines and by-products with ease, and thus can provide copolymers of styrene and maleimide having excellent optical properties, thermal properties and mechanical properties.

WO 2004/101636 A2